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CONCEPTUALISING THE EXPERTISE OF THE MATHEMATICS TEACHER EDUCATOR

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BACKGROUND

The aim for this working group is to further the development of research within the domain of the mathematics teacher educator (MTE), specifically to move beyond descriptions of MTE knowledge towards ways of conceptualising and researching the *expertise* of the MTE. The phenomenon of *expertise* of the MTE is not easily defined. We follow Beswick & Goos (2018) by using the label MTE as "anyone engaged in the education or development of teachers of mathematics" (p. 418) and recognise that MTE, as a role, encompasses a diverse set of practices within mathematics teacher education. Recently, within mathematics teacher education, there has been increasing interest in the development of theories that can account for what and how MTEs learn; for example, the publication of a recent special issue of the *Journal of Mathematics Teacher Education* where some scholars have extended existing models of mathematics teacher knowledge as a way of describing the knowledge of the MTE (e.g., Leikin, Zazkis & Meller, 2018). This working group builds on foundations from previous PME working sessions that have been centred around MTEs (Goos, Chapman, Brown, & Novotna, 2011; Beswick, Goos, & Chapman, 2014) and looks to extend existing conceptualisations of the expertise of MTEs beyond descriptions of MTE knowledge (e.g., Appova & Taylor, 2017).

AIMS OF WORKING GROUP

- To begin to theorise the expertise of MTEs by exploring personal stories, experiences and a variety of frameworks.
- To formulate researchable questions.
- To explore and develop potential methodologies that support these questions.

OUTLINE OF SESSIONS

Session1

- Introductions and sharing of experiences that inform ways of thinking about expertise and asking: what specific expertise do we have as MTEs?; how might we differentiate between MTE expertise and other domains of expertise, for example, teacher educator expertise more broadly?; The two presenters will begin by sharing their stories as MTEs (of practice, context, research). Attendees will then be invited to share their own stories leading to a discussion of themes, commonalities, differences, etc.

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- Brief presentation of existing ways that the expertise of MTEs has been described (considering what has not yet been asked or answered) moving to some suggestions for possible new approaches to and conceptualisations for describing MTE expertise that offer alternatives to expertise as knowledge.
- Discussion in groups with a focus on the development of frameworks that support the interaction between the practice of MTEs and conceptualisations of MTE expertise.

Session 2:

- Building off session 1, groups discuss: Creating a set of researchable questions in the area of MTE learning/expertise and consider i) which of these questions would you like to/be able to research? ii) what theoretical frameworks could you use/develop to support this research? iii) what methodologies are appropriate for these questions? iv) what would data consist of?
- Each group to share responses and then discuss and agree on next steps for future collaborations, including consideration of a possible joint output for participants such as a special issue for the *Journal of Mathematics Teacher Education*.

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